

NIA

1646

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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/431,888A

DATE: 02/23/2000
TIME: 13:57:59

Input Set: I431888A.RAW

This Raw Listing contains the General Information Section and up to first 5 pages.

R. S. HOPP

1 <110> APPLICANT: Wise, Lyn M
2 Mercer, Andrew A
3 Savory, Loreen J
4 Fleming, Stephen B
5 Stacker, Stephen
6 <120> TITLE OF INVENTION: VASCULAR ENOTHELIAL GROWTH FACTOR-LIKE PROTEIN FROM ORF
7 VIRUS NZ2 BINDS AND ACTIVATES MAMMALIAN VEGF
8 RECEPTOR-2, AND USES THEREOF
9 <130> FILE REFERENCE: Sequence Listing for 09/431,833
10 <140> CURRENT APPLICATION NUMBER: US/09/431,888A
11 <141> CURRENT FILING DATE: 1999-11-02
12 <150> EARLIER APPLICATION NUMBER: 60/106,689
13 <151> EARLIER FILING DATE: 1998-11-02
14 <150> EARLIER APPLICATION NUMBER: 60/106,800
15 <151> EARLIER FILING DATE: 1998-11-03
16 <160> NUMBER OF SEQ ID NOS: 11
17 <170> SOFTWARE: PatentIn Ver. 2.0
18 <210> SEQ ID NO 1
19 <211> LENGTH: 402
20 <212> TYPE: DNA
21 <213> ORGANISM: Orf virus
22 <400> SEQUENCE: 1
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gacagcaaca cgaaaaggatg gtccgaagtg ctgaaaggca gcgagtgc aagcgtggcc 120
attgttgttc ctgtaaagcga gacgcaccca gagctgactt ctcagcggtt caaccgcgg 180
tgtgtcacgt tgatgcgatg cggcgggtgc tgcaacgacg agagtttga atgcgtcccc 240
acggaagaag taaaacgtgac gatggaactc ctggggcggt cgggctccgg tagtaacggg 300
atgcaacgtc ttagcttcgt agagcataag aaatgcgatt ttagaccacg attcacaacc 360
acgccaccga cgaccacaag gccgcccaga agacgcccgt ag 402
30 <210> SEQ ID NO 2
31 <211> LENGTH: 133
32 <212> TYPE: PRT
33 <213> ORGANISM: Orf virus
34 <400> SEQUENCE: 2
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35 1 5 10 15 MAR-9-2000
36 Leu Leu Asn Ala Asp Ser Asn Thr Lys Gly Trp Ser Glu Val Leu Lys
37 20 25 30
38 Gly Ser Glu Cys Lys Pro Arg Pro Ile Val Val Pro Val Ser Glu Thr
39 35 40 45
40 His Pro Glu Leu Thr Ser Gln Arg Phe Asn Pro Pro Cys Val Thr Leu
41 50 55 60
42 Met Arg Cys Gly Gly Cys Cys Asn Asp Glu Ser Leu Glu Cys Val Pro
43 65 70 75 80
44

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45 Thr Glu Glu Val Asn Val Thr Met Glu Leu Leu Gly Ala Ser Gly Ser
 46 85 90 95
 47 Gly Ser Asn Gly Met Gln Arg Leu Ser Phe Val Glu His Lys Lys Cys
 48 100 105 110
 49 Asp Cys Arg Pro Arg Phe Thr Thr Thr Pro Pro Thr Thr Arg Pro
 50 115 120 125
 51 Pro Arg Arg Arg Arg
 52 130
 53 <210> SEQ ID NO 3
 54 <211> LENGTH: 147
 55 <212> TYPE: PRT
 56 <213> ORGANISM: Homo sapiens
 57 <400> SEQUENCE: 3
 58 Met Asn Phe Leu Leu Ser Trp Val His Trp Ser Leu Ala Leu Leu Leu
 59 1 5 10 15
 60 Tyr Leu His His Ala Lys Trp Ser Gln Ala Ala Pro Met Ala Glu Gly
 61 20 25 30
 62 Gly Gly Gln Asn His His Glu Val Val Lys Phe Met Asp Val Tyr Gln
 63 35 40 45
 64 Arg Ser Tyr Cys His Pro Ile Glu Thr Leu Val Asp Ile Phe Gln Glu
 65 50 55 60
 66 Tyr Pro Asp Glu Ile Glu Tyr Ile Phe Lys Pro Ser Cys Val Pro Leu
 67 65 70 75 80
 68 Met Arg Cys Gly Cys Ser Asn Asp Glu Gly Leu Glu Cys Val Pro
 69 85 90 95
 70 Thr Glu Glu Ser Asn Ile Thr Met Gln Ile Met Arg Ile Lys Pro His
 71 100 105 110
 72 Gln Gly Gln His Ile Gly Glu Met Ser Phe Leu Gln His Asn Lys Cys
 73 115 120 125
 74 Glu Cys Arg Pro Lys Lys Asp Arg Ala Arg Gln Glu Asn Cys Asp Lys
 75 130 135 140
 76 Pro Arg Arg
 77 145
 78 <210> SEQ ID NO 4
 79 <211> LENGTH: 191
 80 <212> TYPE: PRT
 81 <213> ORGANISM: Homo sapiens
 82 <400> SEQUENCE: 4
 83 Met Asn Phe Leu Leu Ser Trp Val His Trp Ser Leu Ala Leu Leu
 84 1 5 10 15
 85 Tyr Leu His His Ala Lys Trp Ser Gln Ala Ala Pro Met Ala Glu Gly
 86 20 25 30
 87 Gly Gly Gln Asn His His Glu Val Val Lys Phe Met Asp Val Tyr Gln
 88 35 40 45
 89 Arg Ser Tyr Cys His Pro Ile Glu Thr Leu Val Asp Ile Phe Gln Glu
 90 50 55 60
 91 Tyr Pro Asp Glu Ile Glu Tyr Ile Phe Lys Pro Ser Cys Val Pro Leu
 92 65 70 75 80
 93 Met Arg Cys Gly Cys Ser Asn Asp Glu Gly Leu Glu Cys Val Pro
 94 85 90 95

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95 Thr Glu Glu Ser Asn Ile Thr Met Gln Ile Met Arg Ile Lys Pro His
 96 100 105 110
 97 Gln Gly Gln His Ile Gly Glu Met Ser Phe Leu Gln His Asn Lys Cys
 98 115 120 125
 99 Glu Cys Arg Pro Lys Lys Asp Arg Ala Arg Gln Glu Asn Pro Cys Gly
 100 130 135 140
 101 Pro Cys Ser Glu Arg Arg Lys His Leu Phe Val Gln Asp Pro Gln Thr
 102 145 150 155 160
 103 Cys Lys Cys Ser Cys Lys Asn Thr His Ser Arg Cys Lys Ala Arg Gln
 104 165 170 175
 105 Leu Glu Leu Asn Glu Arg Thr Cys Arg Cys Asp Lys Pro Arg Arg
 106 180 185 190
 107 <210> SEQ ID NO 5
 108 <211> LENGTH: 170
 109 <212> TYPE: PRT
 110 <213> ORGANISM: Homo sapiens
 111 <400> SEQUENCE: 5
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 113 1 5 10 15
 114 Leu Ala Leu Pro Ala Val Pro Pro Gln Gln Trp Ala Leu Ser Ala Gly
 115 20 25 30
 116 Asn Gly Ser Ser Glu Val Glu Val Val Pro Phe Gln Glu Val Trp Gly
 117 35 40 45
 118 Arg Ser Tyr Cys Arg Ala Leu Glu Arg Leu Val Asp Val Val Ser Glu
 119 50 55 60
 120 Tyr Pro Ser Glu Val Glu His Met Phe Ser Pro Ser Cys Val Ser Leu
 121 65 70 75 80
 122 Leu Arg Cys Thr Gly Cys Cys Gly Asp Glu Asp Leu His Cys Val Pro
 123 85 90 95
 124 Val Glu Thr Ala Asn Val Thr Met Gln Leu Leu Lys Ile Arg Ser Gly
 125 100 105 110
 126 Asp Arg Pro Ser Tyr Val Glu Leu Thr Phe Ser Gln His Val Arg Cys
 127 115 120 125
 128 Glu Cys Arg Pro Leu Arg Glu Lys Met Lys Pro Glu Arg Arg Arg Pro
 129 130 135 140
 130 Lys Gly Arg Gly Lys Arg Arg Glu Asn Gln Arg Pro Thr Asp Cys
 131 145 150 155 160
 132 His Leu Cys Gly Asp Ala Val Pro Arg Arg
 133 165 170
 134 <210> SEQ ID NO 6
 135 <211> LENGTH: 188
 136 <212> TYPE: PRT
 137 <213> ORGANISM: Homo sapiens
 138 <400> SEQUENCE: 6
 139 Met Ser Pro Leu Leu Arg Arg Leu Leu Ala Ala Leu Leu Gln Leu
 140 1 5 10 15
 141 Ala Pro Ala Gln Ala Pro Val Ser Gln Pro Asp Ala Pro Gly His Gln
 142 20 25 30
 143 Arg Lys Val Val Ser Trp Ile Asp Val Tyr Thr Arg Ala Thr Cys Gln
 144 35 40 45

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145 Pro Arg Glu Val Val Val Pro Leu Thr Val Glu Leu Met Gly Thr Val
 146 50 55 60
 147 Ala Lys Gln Leu Val Pro Ser Cys Val Thr Val Gln Arg Cys Gly Gly
 148 65 70 75 80
 149 Cys Cys Pro Asp Asp Gly Leu Glu Cys Val Pro Thr Gly Gln His Gln
 150 85 90 95
 151 Val Arg Met Gln Ile Leu Met Ile Arg Tyr Pro Ser Ser Gln Leu Gly
 152 100 105 110
 153 Glu Met Ser Leu Glu Glu His Ser Gln Cys Glu Cys Arg Pro Lys Lys
 154 115 120 125
 155 Lys Asp Ser Ala Val Lys Pro Asp Ser Pro Arg Pro Leu Cys Pro Arg
 156 130 135 140
 157 Cys Thr Gln His His Gln Arg Pro Asp Pro Arg Thr Cys Arg Cys Arg
 158 145 150 155 160
 159 Cys Arg Arg Arg Ser Phe Leu Arg Cys Gln Gly Arg Gly Leu Glu Leu
 160 165 170 175
 161 Asn Pro Asp Thr Cys Arg Cys Arg Lys Leu Arg Arg
 162 180 185
 163 <210> SEQ ID NO 7
 164 <211> LENGTH: 228
 165 <212> TYPE: PRT
 166 <213> ORGANISM: Homo sapiens
 167 <400> SEQUENCE: 7
 168 His Asn Arg Glu Gln Ala Asn Leu Asn Ser Arg Thr Glu Glu Thr Ile
 169 1 5 10 15
 170 Lys Phe Ala Ala Ala His Tyr Asn Thr Glu Ile Leu Lys Ser Ile Asp
 171 20 25 30
 172 Asn Glu Trp Arg Lys Thr Gln Cys Met Pro Arg Glu Val Cys Ile Asp
 173 35 40 45
 174 Val Gly Lys Glu Phe Gly Val Ala Thr Asn Thr Phe Phe Lys Pro Pro
 175 50 55 60
 176 Cys Val Ser Val Tyr Arg Cys Gly Gly Cys Cys Asn Ser Glu Gly Leu
 177 65 70 75 80
 178 Gln Cys Met Asn Thr Ser Thr Ser Tyr Leu Ser Lys Thr Leu Phe Glu
 179 85 90 95
 180 Ile Thr Val Pro Leu Ser Gln Gly Pro Lys Pro Val Thr Ile Ser Phe
 181 100 105 110
 182 Ala Asn His Thr Ser Cys Arg Cys Met Ser Lys Leu Asp Val Tyr Arg
 183 115 120 125
 184 Gln Val His Ser Ile Ile Arg Arg Ser Leu Pro Ala Thr Leu Pro Gln
 185 130 135 140
 186 Cys Gln Ala Ala Asn Lys Thr Cys Pro Thr Asn Tyr Met Trp Asn Asn
 187 145 150 155 160
 188 His Ile Cys Arg Cys Leu Ala Gln Glu Asp Phe Met Phe Ser Ser Asp
 189 165 170 175
 190 Ala Gly Asp Asp Ser Thr Asp Gly Phe His Asp Ile Cys Gly Pro Asn
 191 180 185 190
 192 Lys Glu Leu Asp Glu Glu Thr Cys Gln Cys Val Cys Arg Ala Gly Leu
 193 195 200 205
 194 Arg Pro Ala Ser Cys Gly Pro His Lys Glu Leu Asp Arg Asn Ser Cys

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RAW SEQUENCE LISTING
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195	210	215	220
196	Gln Cys Val Cys		
197	225		
198	<210> SEQ ID NO 8		
199	<211> LENGTH: 197		
200	<212> TYPE: PRT		
201	<213> ORGANISM: Homo sapiens		
202	<400> SEQUENCE: 8		
203	Met Asp Ser Arg Ser Ala Ser His Arg Ser Thr Arg Phe Ala Ala Thr		
204	1 5 10 15		
205	Phe Tyr Asp Ile Glu Thr Leu Lys Val Ile Asp Glu Glu Trp Gln Arg		
206	20 25 30		
207	Thr Gln Cys Ser Pro Arg Glu Thr Cys Val Glu Val Ala Ser Glu Leu		
208	35 40 45		
209	Gly Lys Ser Thr Asn Thr Phe Phe Lys Pro Pro Cys Val Asn Val Phe		
210	50 55 60		
211	Arg Cys Gly Gly Cys Cys Asn Glu Glu Ser Leu Ile Cys Met Asn Thr		
212	65 70 75 80		
213	Ser Thr Ser Tyr Ile Ser Lys Gln Leu Phe Glu Ile Ser Val Pro Leu		
214	85 90 95		
215	Thr Ser Val Pro Glu Leu Val Pro Val Lys Val Ala Asn His Thr Gly		
216	100 105 110		
217	Cys Lys Cys Leu Pro Thr Ala Pro Arg His Pro Tyr Ser Ile Ile Arg		
218	115 120 125		
219	Arg Ser Ile Gln Ile Pro Glu Glu Asp Arg Cys Ser His Ser Lys Lys		
220	130 135 140		
221	Leu Cys Pro Ile Asp Met Leu Trp Asp Ser Asn Lys Cys Lys Cys Val		
222	145 150 155 160		
223	Leu Gln Glu Glu Asn Pro Leu Ala Gly Thr Glu Asp His Ser His Leu		
224	165 170 175		
225	Gln Glu Pro Ala Leu Cys Gly Pro His Met Met Phe Asp Glu Asp Arg		
226	180 185 190		
227	Cys Glu Cys Val Cys		
228	195		
229	<210> SEQ ID NO 9		
230	<211> LENGTH: 13		
231	<212> TYPE: PRT		
232	<213> ORGANISM: Orf virus		
233	<220> FEATURE:		
234	<221> NAME/KEY: UNSURE		
235	<222> LOCATION: (2)		
236	<223> OTHER INFORMATION: Any amino acid		
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238	<221> NAME/KEY: UNSURE		
239	<222> LOCATION: (4)..(7)		
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241	<220> FEATURE:		
242	<221> NAME/KEY: UNSURE		
243	<222> LOCATION: (10)		
	<223> OTHER INFORMATION: Any amino acid		

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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VERIFICATION SUMMARY
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Line ? Error/Warning

Original Text

249 W "N" or "Xaa" used: Feature required Pro Xaa Cys Xaa Xaa Xaa Arg Cys Xaa G